NATIONAL HONEY REPORT

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HONEY MARKET FOR THE MONTH OF JANUARY, 2004
VOLUMES OF 10,000 POUNDS OR GREATER UNLESS OTHERWISE STATED
- REPORT INCLUDES BOTH NEW AND OLD CROP HONEY -

Prices paid to beekeepers for extracted, unprocessed honey in major producing states by packers, handlers & other large users, cents per pound, f.o.b. or delivered nearby, containers exchanged or returned, prompt delivery & payment unless otherwise stated.

ARKANSAS
- Soybean, light amber, $1.00

CALIFORNIA
- Alfalfa/Cotton, extra light amber, $1.21 (small lot)
- Blue Curl, extra light amber, $1.34 (small lot)
- Buckwheat, light amber, $1.24
- Clover, light amber, $1.24
- Cotton, extra light amber, $1.24 - - light amber, $1.24–1.29
- Cotton, amber, $1.21
- Cotton/Alfalfa, extra & light amber, $1.05 – 1.10
- Mixed Flowers, extra light & light amber, $1.05 – 1.15
- Orange, extra light amber, $1.40
- Sage, white, $1.50
- Sage, extra light amber, $1.39
- Wildflowers, light amber, $1.24 - - - amber, $1.19

FLORIDA
(all previous commitments)
- Gallberry, extra light amber, $1.40
- Gallberry, light amber, $1.31
- Gallberry, cut comb, $1.50
- Orange, extra light amber, $1.50
- Saw Palmetto, extra light amber, $1.40
- Saw Palmetto/Orange, light amber, $1.35
- Wildflowers, extra light amber, 96¢-$1.06

IDAHO
- Alfalfa, light amber, $1.24
- Alfalfa, amber, $1.16
- Clover, extra light amber, $1.44
- Mixed Flowers, extra light & light amber, $1.34

KANSAS - Alfalfa, dark amber, 49¢

MINNESOTA - Alfalfa, extra light amber, $1.25
- Clover, white, $1.45 – 1.51
- Mixed Flowers, amber, $1.25

MONTANA - Alfalfa, dark amber (melter), 74¢
- Clover, white, $1.49 – 1.50
- Clover, extra light amber, $1.39 - 1.40
- Clover, light amber, $1.49

NEBRASKA - Clover, white, $1.45

NEW YORK - Alfalfa, extra light amber, $1.50
- Clover, light amber, $1.32

NORTH DAKOTA - Alfalfa, extra light amber, $1.50
- Clover, white, $1.25* – 1.51 (lower price-small lot)

OREGON - Alfalfa, extra light amber, 49¢-1.49 (lower price-small lot)
- Alfalfa, light amber, $1.29 – 1.34
- Clover, white, $1.21 – 1.49
- Mixed Flowers, extra light amber, $1.32 – 1.34
- Mixed Flowers, light amber, $1.34
- Wildberry, white, $1.39 – 1.40

SOUTH DAKOTA - Alfalfa, white, $1.40
- Alfalfa, extra light amber, $1.39
- Alfalfa, light amber, $1.30
- Clover, white, $1.40 – 1.50
- Clover, extra light amber, $1.25 – 1.45
- Clover, light amber, $1.15

TEXAS - Chinese Tallow, light amber, $1.24
- Chinese Tallow, amber, $1.21

UTAH - Alfalfa, light amber, $1.24

WASHINGTON - clover, white, $1.44
- Clover, extra light amber, $1.34

WYOMING - Alfalfa, extra light amber, $1.34
- Dark Amber - melter wax - 39¢

Prices paid to Canadian beekeepers for unprocessed, bulk honey by packers and importers in U.S. currency, f.o.b. shipping point containers included unless otherwise stated. Duty and crossing charges extra. Cents per pound.

ALBERTA	- Alfalfa, white, $1.48
PROVINCE NOT REPORTED	- Canola, white, $1.38
PROVINCE NOT REPORTED	- Clover, white, $1.50

Prices paid to importers for bulk honey, duty paid, containers included, cents per pound ex-dock or point of entry unless otherwise stated.

EAST COAST	**BRAZIL**	- Mixed Flowers, light amber, $1.10
		- Mixed Flowers, amber, $1.00
	EGYPT	- Mixed Flowers, extra light amber, $1.25
	INDIA	- Mixed Flowers, light amber, $1.21
		- Rapeseed, white, $1.38
	MEXICO	- Yucatan, light amber, $1.38 - - - amber, $1.00
	PAKISTAN	- Mixed Flowers, extra light amber, $1.25
	VIETNAM	- Mixed Flowers, light amber & amber, 99¢

COLONY, HONEY PLANT AND MARKET CONDITIONS DURING JANUARY, 2004

CALIFORNIA ♥ ♥ ♥

The month began with a series of winter storms that moved into Northern California, bringing heavy rains and mountain snow. Strong winds also caused widespread damage. Then the storm dropped into Southern California bringing only rain. On the 7th, another storm brought more precipitation to Northern California , Bakersfield was setting a record high of 75 degrees. On the 11th, The California Dept. of Water Resourced reported the snowpack in the Sierra Nevada Mountains improved to 18" or 145% of normal, up 3" from 2003. Conditions were fairly mild through the end of January. Occasional light showers was reported in all areas which sometimes trapped fog in the Central Valley. Temperatures were mostly in the 60's except along the coast and in the mountains.

Conflicting reports are coming out as to the condition of the bees as they were checked during January. Come came through the winter in very good condition with healthy bees and good-sized colonies. Others are finding their colonies declined significantly in size and strength. Mites and queens not lasting through the winter, which causes stress, are a couple of ideas on why the bees are not in very good condition. The biggest concern now is many colonies will not be strong enough to move into the almonds for pollination. The almond bloom is running behind last year but not enough that the bees will be able to build back up. This will probably cause a shortage of bees for pollination. Producers with healthy bees reported they are receiving calls from beekeepers that have pollination contracts they can't fill unless they find additional bees. Cooler, sometimes rainy weather, has also slowed the bloom in other honey plants.

Packers did not purchase a lot honey during January as they had filled up their warehouses last fall. They have been receiving calls from some producers that still have some of last years crop to sell. Orange blossom honey is especially hard to find. Domestic process remained fairly steady but some imports are coming in at lower prices.

FLORIDA ♥♥♥

Florida bee keepers have had a hard time keeping their bee hives alive because of parasites, namely the small hive beetle. Florida bee keepers have been averaging between $20-30 to rent their colony for pollination, while in comparison, their California counter-parts have been getting up to $65 for the same service.

Maple started to bloom in mid January around the central part of the state which is an indication that spring is starting. Florida producers are anticipating such varietal honeys as tupelo and citrus to begin blooming in early February.

The price of honey has fallen which has had a lot to do with the large volume of foreign product currently on the market.

As quoted from Gerald Hayes, Assistant Chief-Apiary Inspection, Division of Plant Industry

GEORGIA ♥♥♥

Colonies around the state were in generally good condition with most beekeepers continuing to feed sugar and/or corn syrup to their colonies on the basis of need. By the end of January colonies were close to the bottom of the normal cycle of population reduction. Egg laying for the spring build-up is expected to commence in February. There were no significant sources of pollen or nectar available as January ended. Red maple is expected to be the first significant source of pollen and nectar to come available in February depending on weather. Weather during January for the most part featured cool to cold days with cold nights. Moisture levels around the state remained adequate.

IDAHO ♥♥♥

Weather conditions from snowstorms are slowing the progression of the movement of bees from storage and being trucked to California. Some had to be dug out from under snow-ladden areas. All should be in place at designated almond orchards by the week of February 12th. Bees already in California reported to be in excellent condition.

Bears have wrecked havoc among some hives, due to deprivation caused possibly by several years droughts. Currently working with the Idaho Department of Fish and Game, Apiarists are trying to solve the problem.

The American Beekeeping Federation held a conference in Florida and many people attended while treating themselves with a well deserved shirt-sleeved vacation.

ILLINOIS ♥♥♥

Beekeepers continued supplemental feeding as most colonies have required feeding since fall harvest. Weather conditions were of concern by the beekeepers as many ice storms and snowfall blanketed most of the state over the month. There were many days of high winds and winter kill was expected to be high. These were early estimates as beekeepers had cautioned they were not checking hives due to extremely cold temperatures. The beekeepers reported heavy package demand from both Illinois and Indiana beekeepers as some beekeepers were planning on rebuilding some of their colonies.

Honey demand continued to be good as beekeepers had little stores on hand.

INDIANA ♥♥♥

Beekeepers began checking their hives early in the month as temperatures of 60 degrees were reported. Most of the state's colonies were reported to be in good condition as overwintering had gone well.

New beekeeper interest was high this year in the state. Fifty new beekeepers attended a new beekeeper's school hosted by the state beekeeper association and the state Apiary office. Local beekeeper and honey supply businesses were also involved in furthering beekeepers education.

Weather conditions varied from above normal temperatures of 60-65 in the southern section the first three days of the month to 10-15 below by the end of the month. Very little cleansing flights were reported after the 3rd of the month and dysentery concerns were expressed by the beekeepers.

MISSISSIPPI ♥♥♥

Colonies around the state were in generally good condition with most beekeepers continuing to feed sugar and/or corn syrup to their colonies on the basis of need. Colonies are close to the bottom of the normal cycle of population reduction in the southern portion of the state, while population levels are expected to reduce still further during February in the northern portion of the state. Egg laying for the spring build-up commenced in late January in the southern portion of the state, while the same process is not expected to commence in the northern portion of the state until latter February. There were no significant sources of pollen or nectar available in the northern portion of the state as January ended. A few domestic flowers were providing a limited amount of pollen during the month in the southern portion of the state. Red maple is expected to be a significant source of pollen and nectar in early February in the southern portion of the state, but in the more northern portions of the state red maple may or may not be a significant February source of pollen and nectar depending on overall weather conditions with warm temperatures (if occurring) being the most helpful. For the state as a whole, weather during January for the most part featured cool to cold days with cold nights. Moisture levels around the state remained adequate.

MONTANA ♥♥♥

The first two weeks of January were extremely cold across the state. On the 5th, West Yellowstone recorded a low of minus 43 degrees and a high of only minus 12 degrees. The high of minus 15 in Helena was the lowest maximum reading for several years. Conditions became mild through the 16th with temperatures two to twelve degrees above normal but by the end of the week, an Arctic front again moved into the state. Some precipitation accompanied the cold. On the 25th, snow covered much of the region but sub-soil moisture levels continued to be short. The last eight days of the month, Glasgow accumulated 24.6" of snow, the city's snowiest January on record. Topsoil moisture rose to 55% adequate by the end of the month.

Bees wintered in the State remained stacked and covered for the winter. With the cold temperatures and snow they are tightly clustered. There is some concern as a lot of the hives are sitting along rivers and if temperatures would rise sharply, flooding could occur. Some producers were beginning to move their hives to higher ground the end of January as a precaution.

Migratory beekeepers made another trip to California the end of January to check on the condition of their colonies and to move them into the almonds. Like other beekeepers, they are seeing losses that are higher than last year. It was noted that bees that were taken to California early last fall suffered higher loses than the bees that were taken down later. The weather was still fairly warm early on and the bees didn't cluster and took lots of flights which caused them to eat their winter stores.

NEW ENGLAND ♥♥♥

Weather for the New England region was cold and dry. Arctic air came through eastern Canada January 8th it settled into the area and stayed through the beginning of February. Temps were 20-30 degrees below normal with lows in the negative teens and wind chill down to 30 below for all but a few days. Precipitation was also bellow normal with northern New England setting records for the driest January on record.

NORTH CAROLINA ♥♥♥

The weather for the month of January brought a wintry mix to the state of North Carolina. The mountain areas have received above average precipitation of snow, ice and freezing rain with the average temperatures ranging below normal. The eastern part of the state has also received a wintry mix during the month, with some heavy icy conditions having been reported. With North Carolina having just finished the year with the wettest year on record, and the ground conditions in good shape for spring, the beekeepers are anticipating a good honey season this year. Apiary activity has been slow during the month of January, however, beekeepers continue their supplemental feeding and checking the colonies for the mite and beetle situation.

OREGON ♥♥♥

The first week of January was very cold across the state. Portland remained below 32 degrees for three consecutive days from the 5th to the 7th and accumulated 4" of snow topped by freezing rain. Farther east, Pendleton's average temperature for the week was 10.4 degrees, more than 22 degrees below normal. They also had 5.7" of snow. By the 9th, temperatures began to warm as Medford set a record 63 degrees. Conditions returned to normal until the end of January when some areas, especially along the coast, received over 6" of rain.

Many beekeepers were busy moving their hives into the almonds during January. It turned out to be a little more difficult this year because of the sever winter weather that covered most of Oregon and Northern California. Mountain passes and highways were sometimes shut down for long periods of time.

UTAH ♥♥♥

Retail sales were slower after the Holidays, with business back to normal for this time of the year. The majority of bees are being kept busy in California orchards. Most hives will be returned in early spring, around March or April. Bees reported to be in good condition.

WASHINGTON ♥♥♥

Winter arrived in Western Washington right after the new year began. On the 2nd, the area was covered with a blanket of ice when temperatures dropped to 20 degrees after a heavy rain. Three days later, as much as 6" of snow fell in parts of the Puget Sound, shutting down most schools and businesses. Freezing rain fell on the snow the next day, breaking off three branches and knocking out power to over 130,000 customers. Temperatures began to warm, melting the ice and snow but also causing mudslides in some areas. The remainder of the month was fairly mild but rainy as 2.76" fell in Olympia the last week of January and 4.62" was recorded along the coast.

Eastern Washington finally saw a more typical January when the month began with record-setting snow when over 5" fell. The night of the 5th, temperatures began to drop. Yakima fell to a record minus 14 and most areas east dropped even lower. On the 7th, another storm brought 5-10" and a day later another 5-6" to the Yakima Valley bringing their total since News Year's Day to 28". The forecast was for temperatures to suddenly rise into the 40's by the end of that week but luckily conditions stayed cool and cloudy through the end of January.

WASHINGTON continued…

Cascade Mountain precipitation at the five Yakima Irrigation Project reservoirs was near normal the end of the month. Bureau officials said precipitation for the month was 96.1% of normal. Bees wintered in Washington are reported to be in good condition with only slight to moderate winter losses. The cold, cloudy days kept them clustered tightly so the were only consuming small amounts of their winter stores.

Migratory beekeepers moved their hives from winter holding yards into the almonds in California. As they were checked before the move, some winter losses were discovered, likely from mites, but only slightly more than last year. Heavier and healthier bees were split and put in with the smaller colonies.

WISCONSIN ♥♥♥

Colonies were reported to be overwintering well the first of the month. Supplemental feeding activities continued throughout the month. Sugar syrup and candy boards were added. Some northern areas reported the snow cover was lighter than normal and beekeepers were concerned the dry conditions might carryover into spring.

Honey demand was reported well in the retail sector. Little honey was in beekeepers hands.

U. S. EXPORTS OF HONEY BY COUNTRY OF DESTINATION, QUANTITY & VALUE

	NOVEMBER 2003		YEAR TO DATE 2003	
	QUANTITY Kilograms	VALUE Dollars	QUANTITY Kilograms	VALUE Dollars
COMB HONEY & HONEY PACKAGED FOR RETAIL SALE - - - - - - - - - - DOMESTIC MERCHANDISE				
Mexico	---	---	20,436	26,157
Guatemala	---	---	589	2,573
Panama	---	---	1,140	5,147
Bermuda	---	---	1,504	8,224
Jamaica	---	---	3,965	5,200
Cayman Islands	---	---	1,076	4,334
Barbados	---	---	863	3,689
Northern Antilles	---	---	3,301	11,641
Aruba	---	---	2,165	13,546
United Kingdom	---	---	816	3,000
Netherlands	---	---	1,009	3,665
France	---	---	1,181	4,515
Germany	---	---	1,824	5,507
Turkey	---	---	2,500	5,100
Israel	---	---	3,103	10,000
Jordan	---	---	1,089	4,450
Kuwait	63,159	82,846	432,596	652,858
Saudi Arabia	60,222	86,671	302,848	453,953
Arab Emirates	---	---	139,213	182,607

EXPORTS continued…

Yemen	63,313	83,049	116,062	133,671
Bahrain	1,045	6,075	13,418	22,304
Cambodia	---	---	1,143	6,185
Malaysia	---	---	14,770	19,372
Singapore	---	---	19,958	26,179
Philippines	---	---	112,883	178,287
China	3,429	12,420	11,542	40,770
Korean Republic	8,463	11.100	126,555	169,000
Hong Kong	---	---	21,030	56,245
Taiwan	---	---	3,716	12,108
Japan	9,449	27,386	202,106	295,164
TOTAL	**209,080**	**309,547**	**1,564,401**	**2,365,441**

HONEY, NATURAL, NOT ELSEWHERE INDICATED OR SPECIFIED - - - - DOMESTIC MERCHANDISE

Canada	54,918	145,534	562,209	1,230,906
Mexico	---	---	1,160	6,682
Costa Rica	---	---	22,776	23,210
Panama	---	---	2,360	10,292
Bermuda	---	---	1,654	7,128
Bahamas	1,635	3,710	8,723	32,516
Jamaica	---	---	2,268	8,799
Barbados	---	---	6,246	23,109
Northern Antilles	---	---	816	4,369
Aruba	---	---	3,030	11,812
Chile	---	---	1,723	8,966
Netherlands	2,064	5,852	10,011	29,476
Germany	---	---	60,468	91,090
Armenia	---	---	14,944	25,867
Israel	---	---	328	2,665
Singapore	---	---	13,202	25,800
Indonesia	---	---	100,949	257,953
Philippines	---	---	6,578	26,900
China	11,106	29,870	50,857	132,621
Korean Republic	58,059	133,769	95,228	267,642
Taiwan	78,884	31,679	78,884	31,679
Japan	30,577	89,000	158,558	417,628
Australia	---	---	25,418	60,900
TOTAL	**237,243**	**439,414**	**1,226,188**	**2,729,398**

EXPORTS continued…

HONEY, NATURAL, NOT ELSEWHERE INDICATED OR SPECIFIED - - - - - FOREIGN MERCHANDISE				
Canada	3,270	6,862	28,083	71,469
Mexico	---	---	18,663	30,178
Costa Rica	---	---	18,600	31,620
Peru	---	---	20,100	34,170
Spain	---	---	186,002	360,840
Indonesia	---	---	37,200	37,200
China	286,238	631,040	1,458,983	2,941,140
Japan	74,240	37,120	74,240	37,120
TOTAL	**363,748**	**675,022**	**1,841,871**	**3,543,737**

U. S. IMPORTS OF HONEY BY COUNTRY, QUANTITY AND VALUE

	NOVEMBER 2003			YEAR TO DATE 2003		
COUNTRY	QUANTITY kilograms	CUSTOMS VALUE dollars	C.I.F. VALUE dollars	QUANTITY kilograms	CUSTOMS VALUE dollars	C.I.F. VALUE dollars
NATURAL HONEY, NOT PACKAGED FOR RETAIL SALE - - - WHITE						
Canada	508,963	1,747,793	1,755,184	8,891,001	29,560,175	29,763,576
Mexico	74,197	210,802	216,534	1,017,664	2,879,801	2,937,757
Chile	---	---	---	1,986,913	5,195,624	5,357,554
Brazil	19,600	49,000	52,940	1,096,057	2,740,447	2,877,173
Uruguay	---	---	---	559,007	1,593,461	1,631,232
Argentina	20,270	46,948	48,736	3,544,947	8,905,617	9,268,386
United Kingdom	---	---	---	13,058	38,419	39,811
Germany	108,542	266,766	276,926	145,392	354,671	367,506
Australia	---	---	---	680	2,742	3,021
Czech Republic	---	---	---	69,479	184,119	195,303
Hungary	18,000	52,197	53,982	198,000	519,008	537,228
Russia	---	---	---	348	2,018	2,305
Ukraine	131,950	252,183	275,775	260,128	493,600	539,260
Spain	6,430	31,641	32,644	7,454	40,582	41,758
Romania	---	---	---	105,818	272,252	286,186
Turkey	18,900	42,840	45,797	74,527	160,131	168,429
India	---	---	---	1,613,763	3,769,722	4,037,654
Pakistan	19,000	29,450	34,216	248,963	366,572	409,569
Vietnam	---	---	---	415,580	905,473	961,225
China, Mainland	1,470,880	2,124,459	2,302,091	7,171,341	10,595,282	11,474,758
Australia	---	---	---	19,868	58,956	59,371
New Zealand	---	---	---	800	4,347	4,600
TOTAL	**2,414,732**	**4,896,269**	**5,139,105**	**27,462,268**	**68,690,429**	**71,013,448**

IMPORTS continued…

NATURAL HONEY, NOT PACKAGED FOR RETAIL SALE - - - EXTRA LIGHT AMBER

Canada	---	---	---	150,769	502,685	511,184
Mexico	132,674	377,322	391,775	589,788	1,661,380	1,708,758
Peru	---	---	---	18,600	39,990	42,440
Chile	---	---	---	502,614	1,377,015	1,425,273
Brazil	---	---	---	583,123	1,346,806	1,404,613
Uruguay	18,360	51,800	54,000	957,251	2,691,749	2,756,729
Argentina	---	---	---	583,866	1,400,908	1,462,938
Germany	---	---	---	1,182	6,899	6,968
Austria	---	---	---	460	3,507	3,574
Czechoslovakia	---	---	---	36,308	95,828	99,812
Ukraine	---	---	---	17,695	41,589	45,036
Romania	---	---	---	18,760	42,009	42,507
Turkey	---	---	---	155,568	398,166	418,386
India	---	---	---	1,090,800	2,424,055	2,518,118
Pakistan	---	---	---	19,000	27,550	30,491
Vietnam	---	---	---	531,229	988,168	1,048,946
Indonesia	167,040	300,672	332,172	185,600	339,648	375,648
China	281,880	399,856	434,936	3,832,566	5,992,188	6,457,976
Australia	---	---	---	18,000	54,660	57,160
Egypt	---	---	---	237,808	441,697	467,353
TOTAL	**599,954**	**1,129,650**	**1,212,883**	**9,530,989**	**19,876,497**	**20,883,910**

NATURAL HONEY, NOT PACKAGED FOR RETAIL SALE - - - LIGHT AMBER

Canada	73,810	229,975	231,726	363,100	1,083,328	1,094,069
Mexico	37,423	80,186	82,289	3,033,473	7,908,692	8,118,360
Dom. Republic	2,526	7,425	7,705	3,424	10,065	10,441
Venezuela	---	---	---	6,143	38,189	39,124
Peru	19,900	40,596	42,316	892,705	1,839,539	1,924,470
Chile	---	---	---	1,965,089	5,066,343	5,236,885
Brazil	287,523	593,722	633,977	4,321,277	9,899,875	10,406,674
Uruguay	---	---	---	3,646,394	9,901,995	10,191,104
Argentina	38,398	88,315	93,315	262,189	579,080	606,017
Denmark	---	---	---	12,096	51,710	55,560
United Kingdom	---	---	---	118	3,314	3,628
France	---	---	---	1,040	4,420	4,634
Germany	40,779	132,658	138,240	218,945	742,720	823,845
Czech Republic	---	---	---	74,053	195,467	203,435
Hungary	---	---	---	25,800	84,495	86,780
Switzerland	---	---	---	8,941	37,360	39,361
Latvia	---	---	---	1,260	2,134	2,364
Lithuania	1,122	4,006	4,306	1,122	4,006	4,306
Ukraine	94,500	212,814	224,658	650,760	1,470,982	1,552,766
Kazakhstan	---	---	---	20,000	43,522	46,219
Moldova	---	---	---	164,040	336,142	350,927
Spain	480	2,627	2,771	480	2,627	2,771
Italy	---	---	---	2,729	12,803	13,439
Romania	144,984	338,394	351,846	784,171	1.849,973	1,934,987
Bulgaria	---	---	---	509,570	1,158,285	1,235,610
Turkey	21,000	44,100	44,350	1,385,445	3,137,369	3,489,706

IMPORTS continued…

India	19,972	41,939	44,114	1,642,245	3,306,465	3,511,619
Pakistan	---	---	---	38,636	59,994	62,300
Burma	---	---	---	56,250	69,075	75,017
Thailand	44,400	77,700	89,681	711,421	1,693,826	1,781,482
Vietnam	189,740	351,937	382,157	6,335,947	12,980,561	13,799,143
Malaysia	180,000	261,000	285,506	2.793,849	4,785,740	5,248,631
Indonesia	---	---	---	18,000	26,684	39,960
China	517,360	587,279	631,882	10,279,461	15,109,147	16,395,906
New Zealand	1,550	10,899	12,394	98,308	382,296	397,059
Egypt	---	---	---	23,415	40,568	44,265
Burkina	---	---	---	19,095	38,190	41,356
TOTAL	**1,677,069**	**3,017,257**	**3,209,918**	**40,370,991**	**84,146,981**	**88,873,300**

NATURAL HONEY, NOT PACKAGED FOR RETAIL SALE – NOT ELSEWHERE SPECIFIED OR INDICATED

Canada	---	---	---	153,932	343,796	348,405
Mexico	50,051	136,019	137,019	2,235,941	5,971,098	6,015,186
Dom. Republic	---	---	---	211,168	208,127	225,312
Colombia	---	---	---	19,656	35,970	37,970
Peru	---	---	---	2,320	3,480	3,670
Chile	---	---	---	95,356	250,604	259,248
Brazil	19,550	49,822	52,924	607,369	1,426,238	1,491,094
Uruguay	---	---	---	117,783	310,077	318,038
Argentina	---	---	---	14,731	40,179	42,618
United Kingdom	---	---	---	106	2,374	2,600
Netherlands	---	---	---	75,199	336,587	337,031
France	---	---	---	2,051	15,113	16,228
Austria	---	---	---	6,963	42,656	48,389
Switzerland	978	9,631	10,029	21,056	154,789	161,114
Russia	---	---	---	3,585	16,217	17,769
Ukraine	---	---	---	21,246	57,323	60,381
Spain	---	---	---	6,283	20,895	22,395
Portugal	---	---	---	6,960	16,951	17,846
Italy	285	2,631	3,281	5,404	17,120	19,187
Greece	---	---	---	922	7,597	7,972
Turkey	24,520	62,505	68,799	96,521	214,613	230,782
Israel	---	---	---	10,990	63,285	66,794
India	---	---	---	353,400	819,159	933,275
Thailand	---	---	---	36,000	63,000	63,090
Vietnam	---	---	---	187,180	336,078	359,736
Hong Kong	---	---	---	5,400	23,364	23,971
Taiwan	---	---	---	33,584	50,818	54,489
Australia	---	---	---	38,049	169,047	176,927
TOTAL	**95,384**	**260,608**	**272,052**	**4,369,155**	**11,016,555**	**11,361,517**

SOURCE: U.S. DEPARTMENT OF COMMERCE - FOREIGN TRADE DIVISION

Pacific Northwest Honey Bee Pollination Survey – 2003

BY: Michael Burgett, Professor Emeritus
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Since 1986 the Honey Bee Laboratory at Oregon State University has conducted an annual survey of pollination economics in the Pacific Northwest (PNW). The information from each year of the survey has been made available both regionally and nationally. The information has proved to be valuable to individual beekeepers who generate income from pollination rental. More recently, the information has been professionally reviewed by agricultural economists from Montana State University and North Carolina State University. They view the establishment of pollination markets as a prime example of how economic interactions evolve in the real world of production agriculture.

2003 was a year of change for the Honey Bee Laboratory at Oregon State University. The honey bee professor entered the emeritus stage of his life and took official retirement from the university. Additionally, the administration at OSU made the decision to dissolve the entire entomology department. A honey bee program is still on-going at OSU but is now officially administered by the Department of Horticulture. The Honey Bee Laboratory is still functioning, but at a reduced profile. One of the activities that will continue for the foreseeable future is the conduct of the annual pollination economics survey.

A physical casualty in the closure of the entomology department was the loss of the PNW beekeepers mailing list. This has had consequences for the pollination survey conducted in 2003. A number of commercial beekeepers who had previously been sent survey forms did not receive them in 2003. This resulted in a reduced number of correspondents. A new mailing list is presently being generated and it is hoped that for 2004 a larger group of beekeepers will choose to participate. The strength of the survey relies on beekeeper willingness to take the time and effort to complete the survey forms. If you did not get a survey in 2003 and would like to participate in the 2004 program please contact the author at: Department of Horticulture, 4017 ALS Bld., OSU, Corvallis, OR 97331.

With each year's information, the strength and importance of our region's beekeeping industry is highlighted. All participants in a regional agricultural industry should understand the critical role played by beekeeping in overall agricultural production. This is especially true today with the increased costs and problems caused by the presence of honey bee mite parasites and the expanding geographical range of our European honey bee's tropical "cousin" the Africanized honey bee, now well established southern California, as well as Texas, New Mexico, Arizona and Nevada.

The use of managed honey bee colonies for commercial crop pollination remains the most important function of the PNW beekeeping industry. The vast & diverse agriculture of the PNW relies on a healthy & strong beekeeping industry to maintain optimum production. An enhanced knowledge of pollination economics is critical to every beekeeper that enters into the world of commercial crop pollination. It is also important for those growers who contract honey bee colonies for managed pollination to understand current economic conditions of the beekeeping industry.

This year's survey provides data that continue to show a number of trends, one of which is the dependence of PNW commercial beekeepers on the income generated from colony rentals. For 2003 the average commercial beekeeper reported receiving 55% of his or her annual operating gross from pollination rentals, which is a reduced figure from previous years. This reduction in the dependence on pollination rental income has been strongly influenced by the dramatic increase in the wholesale price of honey for the past two years. One concern for that segment of the agricultural industry that requires managed pollination, is that the recent phenomenon of markedly increased honey prices will reduce the number of colonies available for pollination rental. That this has happened, has yet to be shown, but for 2003 it is obvious that the income percentage from honey sales has increased and correspondingly, the percent of income from pollination rental has decreased, a result primarily from increased honey prices, not a decrease in the level of pollination colony rental activity.

Ever since the arrival of the tracheal mites and varroa the average size of an individual commercial operation has increased. This is a reflection of higher colony mortality and the need to maintain adequate colony numbers for pollination contracts. The mite "plague" effectively eliminated marginal beekeeping operations and those that remained needed to become larger and more efficient in order to fulfill the need for rental colonies by the at-large agricultural base in the PNW and in California.

As mentioned above, the "usual" beekeeper population that received the pollination survey was dramatically reduced in 2003, due to a major logistical problem. A total of 12 commercial beekeepers returned completed surveys in 2003. These individual beekeepers collectively owned 31,352 colonies. A total of 74,411 colony rentals were reported for all respondents, which produced $2,712,738 in rental income for the 12 participating beekeepers.

For 2003 the average pollination rental fee, computed from commercial beekeeper rentals on all crops reported, was $36^{45}. This is a miniscule 0.^{05} increase from the average pollination fee charged in 2002 ($36^{40}) (see Table 1 & Figure 1).

In past years commercial beekeepers have been responsible for 99% of all reported pollination rentals and a corresponding 99% of all pollination income. The data from semi-commercial beekeepers for 2003 were so small that it would be improper to estimate their role in overall pollination rentals. Assuming no dramatic change in the population of semi-commercial beekeepers, they still are minor players in the overall pollination situation for commercial agriculture throughout the PNW.

For a commercial beekeeper the gross amount of income generated from pollination rental leveled off in 1997 and 1998, but increased in 1999 ($183,780). For 2003 this figure was calculated to be $225,676. The increase results largely from the increasing size of the average commercial operation.

During the past ten years the average rental fee has increased from $28[10] (1994) to $36[45] (2003). It needs to be stressed that honey bee colony rental has, for many decades, been an underpaid service to the agricultural industry. It is really only within the past decade that rental fees have begun to more accurately reflect the enormous value-added service of managed pollination. This is shown by the 98% increase in the average pollination fee during the last fourteen years; 1990 = $18[40] to 2003 = $36[45].

Within the PNW, tree fruits are the dominant crops for pollination income (see Table 2). In 2003 the combination of pears, sweet cherries and apples accounted for 40% of all reported rentals and 40% of all reported pollination income. Paradoxically, the single most important crop for PNW beekeepers is grown in California, *i.e.*, almonds. Almonds were responsible for 47% of all rentals and 47% of all rental income in the 2003 survey. Almonds consistently have produced a high average pollination fee; for 2003 the average was $46[50]. More than 95% of all commercial colonies in Oregon and Washington are taken to California for almond pollination. In 2003 the combination of almonds and tree fruit accounted for 87% of all rentals and 87% of pollination income, which illustrates the dominance and importance of these crops for a commercial PNW beekeeper.

In 2003, for crops pollinated in the PNW, cucumber pollination provided the highest average fee at $52[00] per colony rental. The cucumber "average" should be taken with a slight grain of salt as only two corresponding beekeepers reported cucumber pollinations, and in one instance a pollination fee of $65/colony was reported. In terms of acreage, apples are the largest crop grown in the region and this is reflected by the large number of reported rentals (28% of all rentals and 25% of the total reported rental income.)

The crops with the lowest pollination fees are the legumes crimson clover and hairy vetch, both of which are grown as seed crops but are also traditional honey producers, hence historically low fees. This year the few beekeepers who reported crimson clover seed pollination charged no pollination fee to the growers. The significance of vetch and clovers grown for seed to the overall regional pollination income is very minor, in terms of rental income, the number of colonies involved, and the very regional nature of both crops (mid- to northern Willamette Valley).

Berry crops (blackberries, raspberries and blueberries), which as late spring to early summer bloomers and copious nectar producers (blackberries and raspberries), often produce honey crops as well as pollination fees. The 2003 average pollination fee for all combined berry crops was $23[70] which is nearly unchanged from the 2002 survey.

The average PNW commercial honey bee colony was rented 2.37 times in 2003 and this includes California almonds. This is an increase from the past several years. This statistic had been dropping since 1999 when the average number of rentals per colony was 2.77. Does this actually reflect the real world situation? Are commercial beekeepers concentrating on almonds and PNW tree fruit (which historically provide the major sources of pollination income) and reducing the number of colonies involved in minor crop pollination? At this time our data are not able to provide a reasonable answer to this question.

For the 2003 pollination season an average rental fee of $36[45], combined with an average of 2.37 pollination sets per colony, results in an annual per colony pollination income of $86[40]. which is close to the 1999 colony income statistic of $89[70]**.** And with the "average" commercial operation running 2,612 colonies, a hypothetical gross pollination income for the "average" commercial beekeeper was $225,676 in 2003.

The combined colony numbers from those commercial beekeepers who responded to the 2003 survey, (31,352 hives), represent at least one-fifth to perhaps as many as one-fourth of the commercial hives in Oregon and Washington. Therefore, if we multiply the reported pollination income ($2,712,738) by a factor of 5 and 4, we have a ball park estimate of the pollination income generated by commercial beekeeping in the PNW, *i.e.*, a regional pollination income perhaps as low as $11,000,000 to a reasonable high of $14,500,000. This is far more than the normal "estimates" assigned to the bee industry by agricultural economists, who, for reasons unexplained, usually do not include pollination rental income in their estimates of the beekeeping industry economic status. Pollination income in the PNW far exceeds the value of honey and wax sales for our regional beekeeping industry. Pollination rental income is frequently four to five times greater than honey and wax sales in any given year.

An added question to the survey was how frequent is the use of written pollination contracts between beekeepers and their respective growers. In the past three years the responses were very similar. It appears that using written contracts is not the usual situation. 70% of the commercial beekeepers said they do not use them; 15% said they always use them; and 15% said they use written contracts only for new accounts involving growers they have never worked with in the past.

While colony income from pollination rental is a critical statistic, so therefore is the annual cost to maintain a healthy hive of honey bees. Responses to this question on the survey have varied widely, often from a misunderstanding of what was being asked. However, numerous commercial beekeepers, who have over the years maintained excellent cost accounting records, have responded with numbers that are very reasonable relative to today's economy. The average annual hive maintenance cost was $112[10] per colony for the year 2003 (highest reported per colony maintenance cost = $175; lowest = $75).

It is very important to recognize that the average colony maintenance cost is higher than the average per colony pollination income. From the 2003 survey information pollination income was 86^{40}/colony and the colony maintenance cost was 112^{10}; a difference of 35^{70} per colony. This illustrates that operation profits are generated by other sources of income outside of pollination rental, most importantly, honey production. As all beekeepers realize, the years 2003 largely maintained the dramatic increases in the wholesale price of honey that occurred in 2002. Depending on when you sold or contracted your honey in 2003, the wholesale price was from a low of 1^{00} to as much as 1^{50} per pound. Basing wholesale honey prices at a conservative 1^{25} cents per pound, the average commercial hive had to produce about 28.5 pounds of honey in order to break even.

Remember that much of the data presented here represent the pollination rental situation of a hypothetical "average" commercial beekeeper. For individual beekeepers the survey results are most useful as benchmarks against which they should compare their individual operations. Please let me stress again that all of these "projections" are only as accurate as the data provided by responding beekeepers. The projections also assume that the participating beekeepers collectively represent the mainstream of commercial beekeeping in the Pacific Northwest.

I wish to again thank all those beekeepers in Oregon and Washington who took the time to participate in the survey, which over the past eighteen years, has generated the most accurate assessment of commercial pollination known in the U.S.

TABLE 1: Average Pollination Fee 1992-2003

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
19.25	22.50	28.10	29.60	31.55	31.05	29.65	32.25	32.85	33.65	36.40	36.45

TABLE 2. 2003 Average Commercial Pollination Fees by Crop (responding commercial beekeepers)

Crop	No. Rentals	Avg. Fee	Income($)
Pears	5,648	30^{15}	$170,377
Cherries	8,652	28^{60}	247,601
Apples	20,792	32^{35}	672,744
Berries[1]	788	21^{40-}	16,856
Blueberries	1,802	24^{70}	44,502
Cranberries	1,000	40^{00}	40,000
Vegetable seed	3,878	41^{10}	159,298
Clover seed[2]	292	20^{25}	5,920
Crimson clover seed	856	-0-	-0-
Radish seed	510	26^{20}	13,350
Cucumbers	300	52^{00}	15,600
Sq. & Pump. seed	384	38^{75}	14,880
Watermelon	960	35^{00}	33,600
Misc.[3]	132	26^{70}	3,524
Almonds	27,412	46^{50}	1,274,486

SUMMARY = 74,411

Average Pollination Fee = **36^{45}**

[1]Includes Blackberries, Raspberries, Marionberries & Loganberries.
[2]Includes red & white clover as grown for seed.
[3]Includes kiwi & flower seed.

TABLE 3: Average colony numbers, average rental fee per hive, and average annual rental income per hive for a commercial beekeeping operation in the Pacific Northwest 1992-2003.

Year	Average No. Colonies	Average Rental Fee	Average Annual Rental Income per Colony
1992	765	19^{25}	49^{70}
1993	990	22^{50}	62^{25}
1994	1,225	28^{10}	78^{70}
1995	1,348	29^{60}	78^{15}
1996	1,350	31^{55}	97^{50}
1997	1,504	31^{05}	92^{20}
1998	1,153	29^{65}	83^{00}
1999	2,058	32^{25}	89^{30}
2000	2,055	32^{85}	77^{40}
2001	3,168	33^{65}	64^{60}
2002	4,255	36^{40}	63^{75}
2003	**2,612**	**36^{45}**	**86^{40}**

SUMMARY INFORMATION - 2003

Total number of participating commercial beekeepers = **12**

Total colony rentals = **74,411**

The average per colony pollination rental fee (for all beekeepers, for all crops including California almonds) was: **36^{45}**

The average commercial colony was placed in **2.37** pollination sets in 2003, for an average per hive rental income of **86^{40}**.

The average commercial bee operation maintained **2,612** colonies and grossed **$225,676** in pollination rental income for 2003.